WE CLAIM AS OUR INVENTION

Docket No.: 449122031200

## **AMENDMENTS TO THE CLAIMS**

Please replace the claims, including all prior versions, with the following listing of claims found below.

## **Listing of Claims:**

Claims 1-17 (Previously canceled).

18. (Currently amended) A method for removal of ATM cells from an ATM communications device, comprising the steps of:

providing a plurality of ATM cells, a plurality of which are in each case assigned to a common frame and which are stored in connection-specific queues;

providing a first algorithm by means of which, with the exception of a first and a last ATM cell in a frame, all newly arriving cells in the frame are removed;

providing a second algorithm by means of which all from a first cell to a last cell, are removed upon arrival in a queue from the ATM communications device;

at a start of a transmission process, indicating by a user a maximum number of ATM cells per frame, and transmitting the ATM cells using said maximum number; and

when said maximum number is exceeded, discarding the associated frame or using the first algorithm.

- 19. (Previously presented) The method according to claim 18 wherein a length of the queue is controlled on a connection-specific basis.
- 20. (Previously presented) The method according to claim 18 wherein a constant value is used per connection, which is a measure of a maximum frame size of the connection.
- 21. (Previously presented) The method according to claim 18 wherein, per connection, a number of the cells which have arrived for said connection since an end of the last frame for said connection is stored.
- 22. (Previously presented) The method according to claim 18 wherein no high-priority cells are stored for a connection if a length of the queue for said connection is equal to a value which is independent of said connection and which represents a measure for a fixed upper limit for the queue.

23. (Previously presented) The method according to claim 18 wherein if high-priority frames do not exceed the maximum number of cells per frame, the first algorithm is not used for said frame.

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- 24. (Previously presented) The method according to claim 18 wherein a specific portion of a buffer store is reserved for high-priority cells per connection, and low-priority cells are not given any access to said specific portion of the store.
- 25. (Previously presented) The method according to claim 18 wherein no low-priority cells are stored for a connection if the length of the queue for said connection is of at least one size S\_PPD\_1 = S\_EPD\_1 + MFS, where S\_EPD\_1 is independent of said connection and a maximum number of cells per MFS depends on the connection, where PPD represents partial packet discard, EPD represents early packet discard, and MFS represents maximum frame size.
- 26. (Previously presented) The method according to claim 18 wherein high-priority frames are completely discarded if, on arrival of a first cell of a connection, less than a maximum number of cells per frame MFS remains in the logic queue for this connection or the logic queue exceeds a threshold and a status of a buffer store indicates that high-priority frames should be discarded, where MFS stands for maximum frame size.
- 27. (Previously presented) The method according to claim 18 wherein high- priority frames are discarded if, on arrival of a cell which is neither a first nor a last cell in a frame, a logic value queue has at most one free memory location, or if a length of the logic queue exceeds a connection-specific threshold value or if a filling level of a buffer store indicates that high-priority frames should be rejected, or if the length of the frame is greater than cells with the maximum number of cells per frame.
- 28. (Previously presented) The method according to claim 18 wherein low-priority frames are completely discarded if, on arrival of a first cell of the connection, a length of the queue for this connection is greater than a variable S\_PPD\_1 or if the length of the queue is longer than a value S\_EPD\_1 and a status of a buffer store indicates that low-priority frames should be discarded, where PPD represents partial packet discard and EPD represents early packet discard.
- 29. (Currently amended) The method according to claim 18 wherein some low-priority frames for a connection are discarded if, on arrival of a cell which is neither a first nor a last cell in a



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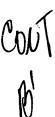
frame, a length of the queue for said connection is greater than a variable S\_PPD\_1 - 1 or the length of a queue is greater than a variable S\_PPD\_1 and a status of the buffer store indicates that low-priority frames cells should be discarded or if the frame is longer than the maximum number of cells for frame size, where PPD represents partial packet discard.

- 30. (Currently amended) The method according to claim 28 wherein a queue-specific value S\_EPD\_0 is greater than a value S\_PPD\_1 and less than a value S\_PPD\_0+MFS where MFS is the maximum number of cells per frame, and the value S\_PPD\_0 represents a measure for a fixed upper limit for the queue, where MFS represents maximum frame size.
- 31. (Previously presented) The method according to claim 18 wherein if a filling level of a buffer store is low, high-priority frames whose first cell has been transferred and whose frame length does not exceed the maximum number of cells per frame are not subjected to the first algorithm.
- 32. (Previously presented) The method according to claim 18 wherein if a filling level of a buffer store is low, low-priority frames whose first cell has been transferred and whose frame length does not exceed the maximum number of cells per frame are not subjected to the first algorithm.
- 33. (Previously presented) The method according to claim 30 wherein an EPD-flag and a FPD-flag are not set at a same time, where FPD represents full packet discard.
- 34. (Previously presented) The method according to claim 33 wherein the values MFS + S\_EPD 0 are stored and variables EPD\_FLAG, FPD\_FLAG and current\_Frame\_length are controlled for each connection, a variable current\_Frame\_length being a measure of a length of the current frame.
- 35. (Currently amended) A method for removal of ATM cells from an ATM communications device, comprising the steps of:

providing a plurality of ATM cells, at least some of which are in each case assigned to a common frame and which are stored in connection-specific queues;

providing a first algorithm by means of which, with the exception of a first and a last ATM cell in a frame, newly arriving cells in the frame are removed;

providing a second algorithm by means of which the ATM cells in a frame, from a first cell



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to a last cell, are removed upon arrival in a queue from the ATM communications device;

at a start of a transmission process, indicating by a user a maximum number of ATM cells per frame, and transmitting the ATM cells using said maximum number; and

when said maximum number is exceeded, discarding the associated frame or using the first algorithm.